



News Update

ICID•CIID

INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE

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From Secretary General's Desk...



Dear friends,

Thanks to PH Bart Schultz and VPH Henri Tardieu, ICID has brought out its concluding documents on the topic of Water for food for ending poverty and hunger (also placed in our website). ICID

assured a followup action emerging out of the Forum recommendations in the concluding session. A key message that emanated from the exercise, which involved a dynamic consultation process with over 65 international and national organizations that joined the consortium handling the topic for the Forum, relates to the acknowledgement and the need for concerted action to achieve "doubling food production by 2035" for the growing population.

In his maiden message for ICID Newsletter (2009/1), President Madramootoo raised before all a key question "Will the target of MDG of halving the number of people affected by poverty and hunger by 2015 be achievable?" and affirmed that only "irrigation and drainage could reduce poverty and hunger, contribute to energy security, and stimulate rural development through the introduction of new marketing opportunities and value added chains".

As you might have noticed in the subsequent issue (ICID Newsletter 2009/2), the relevance of modernization of large scale irrigation projects in the developing world was flagged by Plusquellec as a key for the future. In yet another recent communication, Plusquellec adds some interesting observations on "Moving from Vision to Action". His mail (see page 2 - box item) is stimulating the search for viable and practical options, keeping of course in view, the local and regional perspectives.

The virtual failure of monsoons in several parts of India affecting sizeable Kharif season crops (June – October), the risks threatening rabi crops (November – February) due to possible lack of soil moisture brings to the fore importance of creating sizeable carry over annual storages especially in arid and semi arid situations. In case of several countries in Africa and Asia which are least developed/developing (or emerging economies) the statistics on 'storage per capita' is appallingly low. The brakes in dam building in the

preceding decade(s) due to many reasons, the complacency that there is enough food available globally, and lack of sufficient funding for schemes supporting irrigation, drainage and flood management have put some countries to difficulty in ensuring their population sufficient (and timely) provision of water, food and energy.

The rainfed agriculture has its own niche in many countries. However, security in production is better assured only with irrigation. The unquestionable role of improving efficiency of irrigated lands by modernization in order to deliver more and more, assumes further relevance. The manifold paths to achieve "doubling the food production with limited resources" suggested in the concluding documents of the WWF5 on topic 2.3 seek an all round action; using present schemes to contribute fully as envisaged in their planning and design stages is one amongst them.

The key theme for the forthcoming Asian Regional Congress in Delhi in December 2009 is "Improvement in Efficiency of Irrigation Projects through Technology Upgradation, Better Maintenance & Operation". This is well timed. Our hosts, INCID, indicate that the response papers on the theme are overwhelming (over 225). I am also happy to inform you that IWMI is keen to introduce their recent research work and findings on "The future of Irrigation in Asia". Four sub-themes proposed to be touched upon include: (i) Trends and Drivers of Irrigation in Asia (ii) Irrigation Management Reforms and innovative options for the future (iii) Future scenarios of water and food demand in Asia and (iv) Investment options for the future. This apart, sessions on 'Central Asia', 'Mekong Basin' and Ground Water use will also add value to this year's regional congress.

I have no doubt that you will be reserving your dates for Delhi meet; I look forward to your valuable support for productive 60th IEC meetings in December and 5th Asian Regional Conference. Please do write to us or to INCID if you have any problems in joining the events so that solutions can be evolved in time.

M. Gopalakrishnan
Secretary General

News from ICID National Committees

Chinese Taipei (CTCID)

Prof. Gwo Hsing Yu has taken over as the new Secretary General of the Chinese Taipei Committee on Irrigation and Drainage (CTCID). Dr. Yu has a Ph.D. (1986) in Civil Engineering from Purdue University in U.S.A. He specializes in (i) Statistical and Stochastic Hydrology and (ii) Water Resources Management and Policy. The contact co-ordinates of Dr. Yu are as below –

Prof. Gwo-Hsing Yu, General Secretary, Chinese Taipei Committee on Irrigation and Drainage, ICID (CTCID), Department of Water Resources and Environmental Engineering, College of Engineering, Tamkang University, P.O. Box 1-8 Danshuei, Taipei City 25199, R.O.C., Chinese Taipei. Tel.: +886-2-2625-1598 Extn. 677, Fax No.: + 886-2-2621-0370, E-mail :
ctcid@water.tku.edu.tw

The ICID fraternity extends its warm welcome to Dr. Yu and expresses its thanks to former Secretary General Prof. Yih-Chi-Tan, who has been immensely co-operating with us in the past.

Malaysia (MANCID)

Vice President Hon. Dató Ir. Mohd. Azhari bin Ghazalli (MANCID) has been liaising (March 2008) with Thailand, Indonesia, Vietnam and Myanmar to encourage those countries especially Vietnam to reactivate its membership of ICID. In June 2008, MANCID was privileged to organize a technical visit to Royal Irrigation Department, Bangkok Thailand. MANCID and THAICID came together to sign a Memorandum of Understanding (MoU) during the meeting.

The programme on 'Efficient and Sustainable Water Use to Address

Poverty Alleviation and Food Security' was organized (13-15 November 2008) by INWEPF-Indonesia (Ministry of Public Works) in cooperation with INWEPF-Japan in order to achieve ultimate goal for three main topics, 'Food security and poverty', 'sustainable water use' and 'partnership'. Malaysian delegation lead by the Mr. Hj. Yazid bin Abdullah and Mr. Thian Kim Tai of Division of Irrigation and Agricultural Drainage contributed significantly to working group meetings.

Vice President Hon. Dató Mohd Azhari bin Ghazalli, Director of Irrigation and Agricultural Drainage, Ministry of Agriculture and Agro-Based Industry assumed as Chairman of MANCID, replacing Dató Ir. Hj. Ahmad Husaini bin Sulaiman, Director General of Department of Irrigation and Drainage.

MANCID Secretary, Engr. Hj. Mohd Azmi bin Ismail had the honor to represent MANCID in the 5th World Water Forum events held at Istanbul in Turkey. Vice President and Chairman of MANCID, Hon. Dató Mohd Azhari bin Ghazalli was

invited by INWEPF-Japan as one of the panel policy maker for Topic 2.4: 'Multiple Uses and Function of water service'.

MANCID jointly with Ministry of Agriculture and Agro-Based Industry Malaysia and Department of Irrigation and Drainage Malaysia has successfully organized (14th-16th February 2009). 14th MANCID Annual Conference and 11th MANCID Annual General Meeting. The Role of Irrigation and Drainage in Food Security, Poverty Alleviation and Environmental Sustainability : Towards attaining the Millennium Development Goals in Malaysia was the theme of this conference. (Source : MANCID)

60th IEC and 5th ARC – Updates

The Indian National Committee of ICID (INCID) is working non-stop to welcome you to 60th International Executive Council (IEC) meetings and 5th Asian Regional Conference (ARC) during 6-11 December 2009 at New Delhi, India.

We wish to share with you the latest developments regarding New Delhi meetings as below –

- ◆ The Hon'ble Prime Minister of India, Dr. Manmohan Singh has kindly accepted to inaugurate the Conference.
- ◆ More than 225 synopsis of papers have been received. Acceptance letters have been issued accordingly.
- ◆ More than 300 rooms in various categories of hotels have been blocked – 3 star, 4 star and 5 star – ranging from US\$ 70 to 300 per night.
- ◆ The website www.icid2009delhi.org is operational with facility of online registration and payment.
- ◆ All other arrangements are going on as per schedule and the Organizing Committee formed for this event under the Chairmanship of Mr. A.K. Bajaj, Chairman, Indian National Committee of ICID (INCID) is meeting regularly to take stock of the situation

(Contd. page 4)

Dr. Herve Plusquellec to President Chandra Madramootoo

Dear Chandra,

As far as I know, there has not been any reaction to my relatively provocative article "Response to the Letter from the President" (ICID Newsletter 2009/2 page 7). I am not really surprised. I would like however to reassert my concern about the inadequate attention by the irrigation community to how to move from "Vision to Action".

A number of very comprehensive papers were published in the recent issues of the Journal of Irrigation and Drainage, such as; "the role of water Management for Global Food Production.." from Bart Schultz and Tardieu and " A Food Security Approach to Analyse Irrigation Efficiencies Improvement Demands at the country Level' by J.Mu ; and " Water for Food as Food for Thought.." from M. Yakubov.

All these papers conclude of course that to meet the total food demand in the coming decades, modernization of agricultural water management is required at a large scale to achieve the required increase in food production. However all these papers missed to discuss how modernization is going to take place besides a quick reference to the adoption of water saving techniques (drip and micro-sprinkler).

The paper from J.Mu for example determines that the efficiency for both surface water and groundwater in China should increase from 43 and 70 percent in the year 2000 to 54 and 78

percent in 2030 and 62 and 83 percent in 2050 to meet food demand in China. Comparing to the average efficiency of the irrigation districts in the USA which has slightly increased from 39 to 42 percent in one decade, it is doubtful that the increases in efficiency suggested by Mu could be reasonably achieved in surface systems in China. The paper "Water for Food..." assumes irrigation efficiency over 25 years to improve overall by 10 %, i.e. from 40 %in the base year to 50 % in the year projected". This is misleading. Moving from 40 to 50 percent is an increase of 10 points but an increase of 25 percent over the present value, which is a major challenge given the present state of the large scale systems in the Aral Sea Basin.

One research paper only ("Studying the feasibility of using Micro-irrigation systems for Vegetable Production in Canal Command Area" by S.Kumar) addresses the issue of how to formulate an efficient, reliable and economically viable irrigation management strategy for enhancing production in a canal command area. The author recognizes that in arid and semi-arid areas, groundwater may not be suitable for crop production and that surface water supply is not reliable. Irregular water supply is a problem for vegetable production (and other crops). The author states that the farmers are not greatly interested in adopting micro-irrigation, possibly because of the high investment cost for construction of water storage tanks in addition

to investment costs for micro-irrigation. The author reports the results of field investigations on the feasibility of using micro-irrigation. The experiments were conducted in a research Farm using an existing storage tank. The overall results of the study favored micro-irrigation over existing methods. However the paper does not address how the conversion to water saving methods can be realistically achieved in a large-scale command area.

The techniques for the modernization of largescale irrigation systems are well know and have been adopted in developed countries: Construction of a large number of reservoirs supplying water on demand , such as in the Coachella Irrigation District in Southern California, conversion from a canal system to a pressurized system (Spain), modernization of a canal system through modern communications and automation systems and a combination of these techniques (Australia) . Very few emerging and developing countries have thought addressing these issues, with the exception of Morocco, a country that is planning converting about half million ha to micro-irrigation.

May I suggest that you encourage a greater attention to the practical aspects of how meeting the food security, as it one of the roles of ICID to disseminate the best techniques.

Herve Plusquellec

23rd European Regional Conference, Lviv, Ukraine

'Progress in Managing Water for Food and Rural Development'
18-21 May 2009

'Lviv Declaration'

The 23rd European Regional Conference (ERC) of the International Commission on Irrigation and Drainage (ICID) was held during 18 - 21 May 2009 at Lviv, Ukraine. The theme of the ERC was **'Progress in Managing Water for Food and Rural Development'**.

The conference was organized by the Ukraine National Committee of ICID (UKCID) in cooperation with the ICID European Regional Working Group (ERWG). Professionals from Bulgaria, Germany, Hungary, Iran, the Netherlands, Poland, Romania, Russia, Spain, Ukraine, United Kingdom, Uzbekistan, and ICID participated in the conference and discussed the various keynotes and papers.

The Conference placed high emphasis on the issues related to flood control, water demands, GIS technologies and application in the field of water management. The special theme was dedicated to the climate change in view of frequent floods and droughts observed in Europe. Special attention was given to the development of management plans for river basins.

The 23rd European Regional Conference concluded with following Declaration/ Recommendation :

1. The conference papers highlighted the good 'on-going' development with respect to integrated management of water and land resources both with respect to policy related developments (stakeholder participation, actual implementation, modeling, data collection, storage) and their dissemination.
2. More and more projects were being developed and implemented in an integrated way by taking into account social conditions with stakeholder participation. Possible impacts of climate change including technical, economical, gender, and environmental aspects are getting addressed. However, more need to be done to improve these aspects. This will be especially important during the operation



and maintenance phase of rural development projects. It is in this phase that the benefits of projects are really realized.

3. Primarily due to human activities and to a certain extent due to the impacts of climate change, the effects and impacts of floods and droughts are significantly increasing in many places. Therefore, it is increasingly important that in the development of projects, both the present day conditions as well as the envisaged mid-term and long-term scenarios are taken into account in the decision-making process. In the light of this, the European Water Framework Directive and the European Flood Directive are important guiding documents that have to be implemented jointly.

4. For improved coordination of the wide range of activities for rural development at different spatial levels, like integrated land and water management, river basin management, rural development and spatial planning, it is recommended to update legislation and organizational structures where relevant.

5. There is an urgent need to strengthen international water legislation for protection of water rights for agriculture in order to support sustainable and integrated water management - irrigation and/or drainage, dependent on the local conditions - as a requirement to guarantee food security.

The conference recorded its appreciation to the activities of the Inter-state Coordination Water Commission of Central Asia in the framework of cooperation of the five states - Kazakhstan, Tajikistan, Uzbekistan, Turkmenistan, and Kyrgyzstan - on trans-

boundary waters under the conditions of climate change and felt that it could be an example for the trans-boundary cooperation in other river basins.

The conference also supported the development of a Russian speaking network of water management specialists that was initiated in the Moscow meeting of January 2009 and recommends that scientific organizations join the network.

Agreed actions

- ◆ To increase food production significantly, through sustainable rural development in the forthcoming decades by realizing the potential of several of the European countries, like Ukraine, it was agreed (*by several parties*) that an initiative will be taken for a joint project on **'Integrated Water Management'** for improving food production in European countries. The ICID European Working Group will take the initiative to prepare a proposal in cooperation with the potential partners.
- ◆ To improve the network for European young professionals in the water management sector to be initiated jointly by UKCID and GECID. They will also promote joint activities like research projects, exchanges, summer schools, etc.
- ◆ To review and further develop the activities of Work Team on Sustainable Irrigation Management (WT-SIM) in light of integrated rural development.

Acknowledgement : VP Peter Kovalenko, UKCID, Kiev, Ukraine

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and monitor actions for proper conduct of the event.

Contact : Member Secretary, Indian National Committee on Irrigation and Drainage (INCID), Central Water Commission, Room No. 424 (North), Sewa Bhawan, R.K. Puram, New Delhi-110066, Telfax : + 91-11-2610 7086; E-

mail : iadcwc@yahoo.com; arc5delhi@gmail.com; Website : <http://www.cwc.gov.in/main/INCID/welcome.html> (Source : INCID)

Groundwater and Human Security

The case studies based workshop on "Groundwater and Human Security" was

jointly organized by UN-Water Decade Programme on Capacity Development (UNW-DPC), United Nations University (UNU) and UNESCO at Shiraz, Iran during 16-18 May 2009. The final report of the workshop will be available at UNW-DP's website <<http://www.unwater.unu.edu>>, shortly.

Events

12th Inter Regional Conference on "ENVIRO WATER" during 28 to 30 September 2009 at Rabat – MOROCCO. Contact : Pr. El Houssine Bartali, Vice President, ANAFIDE, E-mail : anafid@menara.ma; Website : www.12thenvirowaterconference.com

Sustainable Agriculture Engineering Conference during 5-8 November 2009 at Sofia, Bulgaria. Contact : Secretariat, Research Institute for Land Reclamation and Agricultural Mechanization, Tel.: +359 2825 7170, Fax : +359 2824 7842, E-mail : ssa.imm.konf@gmail.com; website : www.ssa-imm.com

3rd International Perspective on Current and Future State of Water Resources and the Environment at IIT Chennai, India during 4-6 January 2010. Contact : Dr. Chandra S. Pathak (USA), Conference Chair, E-mail : ewri@asce.org; Website : www.asce.org/conferences/india10

Workshop on Wetlands Management, Economics and Policy during 13-15 January 2010. at Hotel Grand Pacific in Victoria, British Columbia. Contact : Linda Voss (E-mail : wetlands@uvic.ca). More information is available from the Conference website : <http://web.uvic.ca/~wetlands>

World Renewable Energy Congress XI during 25-30 September 2010 at Abu Dhabi. Contact : Dr. Ali Sayigh, Chairman of World Renewable Energy Congress, P.O. Box 362 / Brighton BN2 1YH, UK. Tel : 00(44) (0) 1273 625 643, Fax : 00 (44) (0) 1273 625 768, E-mail : asayigh@wrenuk.co.uk, Website : www.wrenuk.co.uk

ICID Contributions to 5th World Water Forum

(Briefs on ICID contributions to 5th World Water Forum were published in April, May and June 2009 issues of News Update. The one below is the last in series)

Session 2.3.3: Water for bio-energy or food?

KEY ISSUES

- ♦ How can rural communities benefit from bio-energy crops? Can bio-fuel plantations give a sustainable income to the small and marginal farmers?
- ♦ How to avoid conflict with food production by considering reversible crops from non-food to food production, and using marginal water and land?
- ♦ How to develop farming practices compatible with nature balance, increasing the resilience of rural poor and ecosystems?
- ♦ What may be implications of bio-fuels policies and trends for water resources, availability and allocation among uses (including by ecosystems) and on ecosystems and livelihoods?
- ♦ Can bio-fuel prices be not affected from the impact of changing prices of fossil fuels?

RECOMMENDATIONS

- ♦ Consider changing the key question in: *What may be the implications of bio-fuel policies and trends for water resources, their availability and allocation amongst different sectors (agriculture, industry, domestic, and environment) and thus on ecosystems and livelihoods?*

- ♦ The debate should not be water for food OR fuel, it would have to be how to optimize water use for food AND fuel while ensuring water security for other uses;
- ♦ Biofuel production needs to be seen in the wider context of agriculture, with the same debates and issues at stake – resource scarcity and sustainability.

COMMITMENTS

- ♦ Integrated policies and decision-making that complement not contradict each other will be encouraged: integrated approaches will be followed in both policy and implementation;
- ♦ Globally, circumstances differ - solutions will be taken on a situation specific basis.

INITIATIVES

- ♦ Water, and in some cases land, are limiting factors but are needed for food AND fuel, besides for environment and other uses. Farmers take the decisions regarding crops based on market conditions and product demand. Enabling circumstances will be created, especially in least developed countries;
- ♦ To organize and inform small-holder farmers on water availability use. Encourage debates on the means of allocating water, to people and nature;
- ♦ To promote strategic environmental assessments for large-scale land and water acquisitions;
- ♦ To protect rights of the poor to use water for production of basic food demand.

INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE

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